

ABSTRACT OF THE DISCLOSURE

First and second carrier modulators ~~1021 and 1022~~ each modulate a carrier having a each different frequency from each
5 other with a baseband input signal. First and second variable wavelength optical modulators ~~1031 and 1032~~ each convert the modulated signal into an optical signal having a first or second wavelength. An optical multiplexer ~~104~~ multiplexes the optical signals, and sends a multiplexed signal to an optical transmission
10 ~~line 105~~. A wavelength separator ~~106~~ individually outputs wavelength components of the multiplexed signal. First and second optical receivers ~~1071 and 1072~~ each convert these wavelength components into an electrical signal. First and second filters ~~1081 and 1082~~ each pass only the signal components of each different
15 frequency. First and second burst demodulators ~~1091 and 1092~~ each demodulate the modulated signal. With such a structure, a large-capacity optical communication apparatus which is capable of simultaneously using the same wavelength without requiring wavelength management in optical transmitting circuits can be
20 achieved at a low cost.